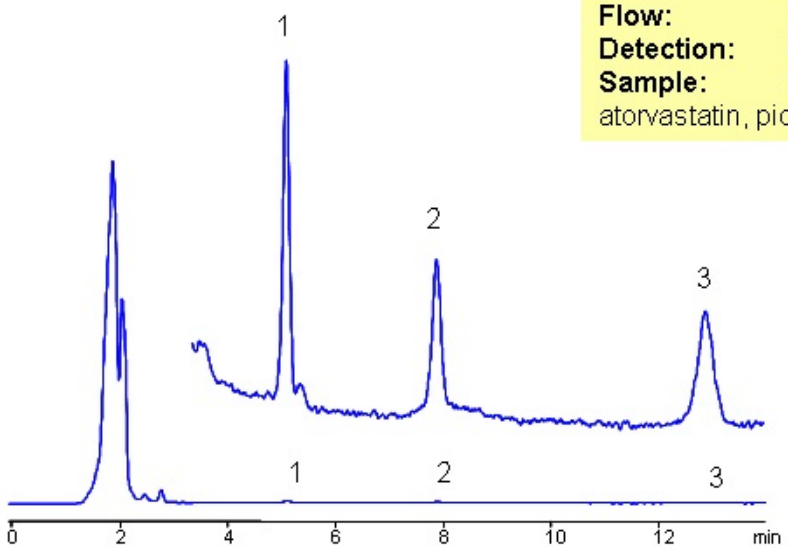
HPLC Separation of Fungicides in a Green Tea Matrix

1. Atorvastasin
2. Picoxystrobin
3. Pyrimethanil

Column: **Primesep 200**
Size: 4.6 x 150 mm
Mobile phase: MeCN 50%, Phosphoric acid 0.05%
Flow: 1.0 mL/min
Detection: UV 270 nm
Sample: Green tea spiked with 0.005mg/ml atorvastatin, picoxystrobin, pyrimethanil



Even though teas are known for containing polyphenols such as catechins, flavonoids and theaflavins, SIELC mixed-mode columns can be used to analyze a matrix from a commercial tea and retain target compounds. In this method, green tea was spiked with 0.005mg/ml of pesticides previously found in teas. Primesep 200 was used for it's reverse-phase and acidic ion-pairing groups. Target compounds were retained and resolved from the majority of the tea matrix peak.

Method Parameters

Column	Primesep 200, 4.6×150 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O – 50/50%
Buffer	H3PO4 – 0.05%
Flow Rate	1.0 mL/min
Detection	UV, 270 nm

Quelle: https://sielc.com/HPLC_Separation_of_Fungicides_in_Green_Tea_Matrix